



41608

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

HÖLLIG ET AL.

PATENT

Serial No.: 09/853,026

Group Art Unit: 2123

Filed: May 11, 2001

Examiner:

For: PROCESS FOR INCREASING THE  
EFFICIENCY OF A COMPUTER IN  
FINITE ELEMENT SIMULATIONS AND  
A COMPUTER FOR PERFORMING  
THAT PROCESS

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and M.P.E.P. § 609, Applicants requests that the  
patents and publications (copies enclosed), listed on the attached PTO-Form 1449, be made of  
record in the above-identified application.

Respectfully submitted,

  
\_\_\_\_\_  
Mark S. Bicks  
Reg. No. 28,770

Roylance, Abrams, Berdo & Goodman, L.L.P.  
1300 19th Street, N.W.  
Washington, D.C. 20036  
(202) 659-9076

Dated: Sept 14, 2001

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 41608	SERIAL NO. 09/853,206
INFORMATION DISCLOSURE CITATION  (Use several sheets if necessary)		APPLICANT Hollig et al.	
		FILING DATE May 11, 2001	GROUP 2123

**U. S. PATENT DOCUMENTS**

**FOREIGN PATENT DOCUMENTS**

**OTHER DOCUMENTS** (including Author, Title, Date, Pertinent Pages, Etc.)

	K Ho-Le, Finite element mesh generation methods: a review and classification, Computer Aided Design; January/February 1988.
	Stephen J. Owen, A Survey of Unstructured Mesh Generation Technology, Department of Civil and Environmental Engineering, Carnegie Mellon University, Pittsburgh, PA and ANSYS Inc., Canonsburg, PA.
	Alexander Fuchs, Berichte aus der Mathematik, Optimierte Delaunay-Triangulierungen zur Vernetzung getrimmter NURBS-Körper, Shaker Verlag, Aachen 1999.
EXAMINER	DATE CONSIDERED

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw Line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 41608	SERIAL NO. 09/853,206
<b>APPLICANT</b> Hollig et al.		
INFORMATION DISCLOSURE CITATION  (Use several sheets if necessary)	<b>FILING DATE</b> May 11, 2001	<b>GROUP</b> 2123

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

**OTHER DOCUMENTS** (including Author, Title, Date, Pertinent Pages, Etc.)

	James H. Bramble, The Lagrange Multiplier Method for Dirichlet's Problem; Mathematics of Computation, Volume 37, Number 155, July 1981.
	Pavel B. Bochev and Max D. Gunzburger, Finite Element Methods of Least-Squares Type; SIAM RVF. Vol 40, No. 4, pp. 789 - 837, December 1998.
	V.L. Rvachev und T.I. Sheiko, R-funcitons in boundary value problems in mechanics, Applied Mechanics Reviews, 48 (1995), pp. 151-188.

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw Line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<p>Form PTO-1449      U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE</p> <p>INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)</p>	<p>ATTY. DOCKET NO. 41608</p> <p>APPLICANT Hollig et al.</p> <p>FILING DATE May 11, 2001</p>	<p>SERIAL NO. 09/853,206</p> <p>GROUP 2123</p>
--	--	--

U.S. PATENT DOCUMENTS

**FOREIGN PATENT DOCUMENTS**

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	V. Shapiro, Theory of R-Functions and Applications: A Primer, Cornell Programmable Automation, Sibley School of Mechanical Engineering; Ithaca, NY (1988), CPA88-3.
	V.L. Rvachev, T.I. Sheiko, V. Shpairo und I. Tsukanov, On Completeness of RFM Solution Structures, Computational Mechanics, 25 (2000), pp. 305-316.
	V. Shapiro und I. Tsukanov, Meshfree Simulation of Deforming Domains, Computer- Aided Design, 31 (1999), pp. 459-471.

**EXAMINER** \_\_\_\_\_ **DATE CONSIDERED** \_\_\_\_\_

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw Line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449      U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 41608	SERIAL NO. 09/853,206
<b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)		
<b>APPLICANT</b> Hollig et al.		
<b>FILING DATE</b> May 11, 2001		<b>GROUP</b> 2123

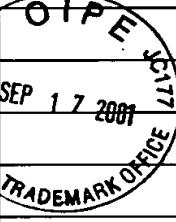
U.S. PATENT DOCUMENTS

**FOREIGN PATENT DOCUMENTS**

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	P. Oswald, Multilevel Solvers for elliptic problems on domains, Multiscale Wavelet Methods for PDEs, W. Dahmen et al (eds), Academic Press (1996), pp. 3-58.
	Die elementfreie Galerkin Methode - Überblick und Anwendungsbeispiele by U. Haussler-Combe, C. Korn, and J. Eibl.
	Weighted Extended B-Spline Approximation of Dirichlet Problems by Klaus Hollig, Ulrich Reif, and Joachim Wipper; SIAM J. Numer. Anal., Vol. 39, No. 2, pp. 442-462; 2001 Society for Industrial and Applied Mathematics, 2000.

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw Line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  <b>INFORMATION DISCLOSURE CITATION</b>  (Use several sheets if necessary)				ATTY. DOCKET NO. 41608		SERIAL NO. 09/853,206		
				APPLICANT <u>Hollig et al.</u>				
				FILING DATE May 11, 2001		GROUP 2123		
				<b>U.S. PATENT DOCUMENTS</b>				
EXAMINER INITIAL		DOCUMENT NUMBER		DATE	NAME	CLASS	SUBCLAS S	FILING DATE IF APPROPRIATE
 SEP 17 2001								
<b>FOREIGN PATENT DOCUMENTS</b>								
		DOCUMENT NUMBER		DATE	COUNTRY	CLASS	SUBCLAS S	TRANSLATION YES NO
<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)</b>								
		Richard H. Bartels, John C. Beatty and Brian A. Barsky, An Introduction to Splines for use in Computer Graphics and Geometric Modeling, pp. 46 - 65, (1987).						
EXAMINER					DATE CONSIDERED			